Newell

List of Publications by Year
in descending order

108 papers	5,198 citations	101543 36 h-index	91884 69 g-index
108 all docs	108 docs citations	108 times ranked	4214 citing authors

#	Article	IF	Citations
1	Corn Nitrogen Nutrition Index Prediction Improved by Integrating Genetic, Environmental, and Management Factors with Active Canopy Sensing Using Machine Learning. Remote Sensing, 2022, 14, 394.	4.0	19
2	Linking soil microbial community structure to potential carbon mineralization: A continental scale assessment of reduced tillage. Soil Biology and Biochemistry, 2022, 168, 108618.	8.8	17
3	A new perspective when examining maize fertilizer nitrogen use efficiency, incrementally. PLoS ONE, 2022, 17, e0267215.	2.5	6
4	Corn emergence uniformity estimation and mapping using UAV imagery and deep learning. Computers and Electronics in Agriculture, 2022, 198, 107008.	7.7	12
5	Selecting soil hydraulic properties as indicators of soil health: Measurement response to management and site characteristics. Soil Science Society of America Journal, 2022, 86, 1206-1226.	2.2	18
6	Report from the conference, â€˜identifying obstacles to applying big data in agricultureâ€™. Precision Agriculture, 2021, 22, 306-315.	6.0	15
7	Improving publicly available corn nitrogen rate recommendation tools with soil and weather measurements. Agronomy Journal, 2021, 113, 2068-2090.	1.8	10
8	Early corn stand count of different cropping systems using UAV-imagery and deep learning. Computers and Electronics in Agriculture, 2021, 186, 106214.	7.7	34
9	Data from a publicâ€“industry partnership for enhancing corn nitrogen research. Agronomy Journal, 2021, 113, 4429.	1.8	4
10	Soil hydrologic grouping guide which soil and weather properties best estimate corn nitrogen need. Agronomy Journal, 2021, 113, 5541-5555.	1.8	4
11	Planting depth and withinâ€field soil variability impacts on corn stand establishment and yield. , 2021, 4, e20186.		3
12	Estimation of Corn Emergence Date Using UAV Imagery. Transactions of the ASABE, 2021, 64, 1173-1183.	1.1	1
13	Estimation of maize yield and effects of variable-rate nitrogen application using UAV-based RGB imagery. Biosystems Engineering, 2020, 189, 24-35.	4.3	60
14	Soilâ€nitrogen, potentially mineralizableâ€nitrogen, and field condition information marginally improves corn nitrogen management. Agronomy Journal, 2020, 112, 4332-4343.	1.8	10
15	Cropping system and landscape characteristics influence longâ€term grain cropÂprofitability. , 2020, 3, e20099.		5
16	Role of inherent soil characteristics in assessing soil health across Missouri. Agricultural and Environmental Letters, 2020, 5, e20021.	1.2	11
17	Weather and soil in the US Midwest influence the effectiveness of singleâ€and splitâ€nitrogen applications in corn production. Agronomy Journal, 2020, 112, 5288-5299.	1.8	11
18	Which Recommendation Tools Are Best for Achieving the Economically Optimal Nitrogen Rate?. Crops & Soils, 2020, 53, 56-60.	0.2	0

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19	Relating fourâ€day soil respiration to corn nitrogen fertilizer needs across 49 U.S. Midwest fields. Soil Science Society of America Journal, 2020, 84, 1195-1208.	2.2	11
20	Soil sample timing, nitrogen fertilization, and incubation length influence anaerobic potentially mineralizable nitrogen. Soil Science Society of America Journal, 2020, 84, 627-637.	2.2	10
21	Corn nitrogen rate recommendation toolsâ€™ performance across eight US midwest corn belt states. Agronomy Journal, 2020, 112, 470-492.	1.8	38
22	Adjusting corn nitrogen management by including a mineralizableâ€nitrogen test with the preplant and presidedress nitrate tests. Agronomy Journal, 2020, 112, 3050-3064.	1.8	5
23	Statistical and machine learning methods evaluated for incorporating soil and weather into corn nitrogen recommendations. Computers and Electronics in Agriculture, 2019, 164, 104872.	7.7	66
24	Predicting Economic Optimal Nitrogen Rate with the Anaerobic Potentially Mineralizable Nitrogen Test. Agronomy Journal, 2019, 111, 3329-3338.	1.8	10
25	United States Midwest Soil and Weather Conditions Influence Anaerobic Potentially Mineralizable Nitrogen. Soil Science Society of America Journal, 2019, 83, 1137-1147.	2.2	18
26	Long-term simulated runoff and water quality from grain cropping systems on restrictive layer soils. Agricultural Water Management, 2019, 213, 36-48.	5.6	13
27	Field variability and vulnerability index to identify regional precision agriculture opportunity. Precision Agriculture, 2018, 19, 589-605.	6.0	6
28	Application of Machine Learning Methodologies for Predicting Corn Economic Optimal Nitrogen Rate. Agronomy Journal, 2018, 110, 2596-2607.	1.8	49
29	Improving an Activeâ€Optical Reflectance Sensor Algorithm Using Soil and Weather Information. Agronomy Journal, 2018, 110, 2541-2551.	1.8	29
30	Cropping System, Landscape Position, and Topsoil Depth Affect Soil Fertility and Nutrient Buffering. Soil Science Society of America Journal, 2018, 82, 382-391.	2.2	7
31	Evaluation of the Haney Soil Health Tool for corn nitrogen recommendations across eight Midwest states. Journal of Soils and Water Conservation, 2018, 73, 587-592.	1.6	35
32	Do Tillage, Cover Crops, and Compost Management within Organic Grain Cropping Affect Greenhouse Gas Emissions?. Agronomy Journal, 2018, 110, 1893-1904.	1.8	7
33	Environmental Implications of Precision Agriculture. Assa, Cssa and Sssa, 2018, , 209-220.	0.6	5
34	Miscanthus Ã— Giganteus Growth and Nutrient Export on 22 Producer Fields. Bioenergy Research, 2018, 11, 426-439.	3.9	4
35	Biomass Yield of Warm-Season Grasses Affected by Nitrogen and Harvest Management. Agronomy Journal, 2018, 110, 890-899.	1.8	1
36	Sensor data fusion for soil health assessment. Geoderma, 2017, 305, 53-61.	5.1	32

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37	Crop Yield and Soil Organic Carbon in Conventional and Noâ€till Organic Systems on a Claypan Soil. Agronomy Journal, 2017, 109, 588-599.	1.8	36
38	Topsoil Thickness Influences Nitrogen Management of Switchgrass. Bioenergy Research, 2017, 10, 465-477.	3.9	4
39	Soil water infiltration affected by topsoil thickness in row crop and switchgrass production systems. Geoderma, 2017, 286, 46-53.	5.1	31
40	Topsoil Thickness Effects on Corn, Soybean, and Switchgrass Production on Claypan Soils. Agronomy Journal, 2017, 109, 782-794.	1.8	12
41	Inversion of soil electrical conductivity data to estimate layered soil properties. Advances in Animal Biosciences, 2017, 8, 433-438.	1.0	12
42	Using Topsoil Thickness to Improve Siteâ€Specific Phosphorus and Potassium Management on Claypan Soil. Agronomy Journal, 2017, 109, 2291-2301.	1.8	3
43	A Publicâ€"Industry Partnership for Enhancing Corn Nitrogen Research and Datasets: Project Description, Methodology, and Outcomes. Agronomy Journal, 2017, 109, 2371-2389.	1.8	40
44	Topsoil Thickness and Harvest Management Influence Switchgrass Production and Profitability. Agronomy Journal, 2017, 109, 985-994.	1.8	2
45	Yield Potential and Nitrogen Requirements of <i>Miscanthus</i> Ã— <i>giganteus</i> on Eroded Soil. Agronomy Journal, 2017, 109, 684-695.	1.8	13
46	Hydraulic Properties Affected by Topsoil Thickness in Switchgrass and Cornâ€"Soybean Cropping Systems. Soil Science Society of America Journal, 2016, 80, 1365-1376.	2.2	28
47	Longâ€Term Impacts of Cropping Systems and Landscape Positions on Claypanâ€Soil Grain Crop Production. Agronomy Journal, 2016, 108, 713-725.	1.8	17
48	Algorithms for Inâ€Season Nutrient Management in Cereals. Agronomy Journal, 2016, 108, 1775-1781.	1.8	66
49	Controls on nitrateâ€N concentrations in groundwater in a Missourian claypan watershed. Earth and Space Science, 2016, 3, 90-105.	2.6	5
50	Impact of rhizome quality on Miscanthus establishment in claypan soil landscapes. Industrial Crops and Products, 2016, 85, 331-340.	5.2	4
51	Validating a Digital Soil Map with Corn Yield Data for Precision Agriculture Decision Support. Agronomy Journal, 2016, 108, 957-965.	1.8	26
52	Long-Term Agroecosystem Research in the Central Mississippi River Basin: Introduction, Establishment, and Overview. Journal of Environmental Quality, 2015, 44, 3-12.	2.0	35
53	Long-Term Agroecosystem Research in the Central Mississippi River Basin: Hydrogeologic Controls and Crop Management Influence on Nitrates in Loess and Fractured Glacial Till. Journal of Environmental Quality, 2015, 44, 58-70.	2.0	8
54	Estimating a Soil Quality Index with VNIR Reflectance Spectroscopy. Soil Science Society of America Journal, 2015, 79, 637-649.	2.2	41

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55	Operational characteristics of commercial crop canopy sensors for nitrogen application in maize. , 2015, , 51-58.		0
56	A Stochastic Approach for Predicting the Profitability of Bioenergy Grasses. Agronomy Journal, 2014, 106, 2137-2145.	1.8	12
57	Spatial Variability of Soil Properties using Nested Variograms at Multiple Scales. Journal of Biosystems Engineering, 2014, 39, 377-388.	2.5	7
58	Modeling soil electrical conductivityâ€“depth relationships with data from proximal and penetrating ECa sensors. Geoderma, 2013, 199, 12-21.	5.1	47
59	Reflectance Spectroscopy Detects Management and Landscape Differences in Soil Carbon and Nitrogen. Soil Science Society of America Journal, 2012, 76, 597-606.	2.2	15
60	Challenges and opportunities for mitigating nitrous oxide emissions from fertilized cropping systems. Frontiers in Ecology and the Environment, 2012, 10, 562-570.	4.0	220
61	Corn Response to Nitrogen is Influenced by Soil Texture and Weather. Agronomy Journal, 2012, 104, 1658-1671.	1.8	174
62	Comparative Breakeven Analysis of Annual Grain and Perennial Switchgrass Cropping Systems on Claypan Soil Landscapes. Agronomy Journal, 2012, 104, 639-648.	1.8	9
63	Relationships between Soil-Based Management Zones and Canopy Sensing for Corn Nitrogen Management. Agronomy Journal, 2012, 104, 119-129.	1.8	19
64	Corn Hybrid Growth Stage Influence on Crop Reflectance Sensing. Agronomy Journal, 2012, 104, 158-164.	1.8	3
65	Disposable Nitrate-Selective Optical Sensor Based on Fluorescent Dye. Journal of Biosystems Engineering, 2012, 37, 209-213.	2.5	6
66	Peak functions for modeling high resolution soil profile data. Geoderma, 2011, 166, 74-83.	5.1	29
67	Sensorâ€Based Nitrogen Applications Outâ€Performed Producerâ€Chosen Rates for Corn in Onâ€Farm Demonstrations. Agronomy Journal, 2011, 103, 1683-1691.	1.8	116
68	Herbicide Transport in Goodwater Creek ExperimentalWatershed: I. Long-Term Research on Atrazine1. Journal of the American Water Resources Association, 2011, 47, 209-223.	2.4	50
69	Herbicide Transport in Goodwater Creek Experimental Watershed: II. Long-Term Research on Acetochlor, Alachlor, Metolachlor, and Metribuzin1. Journal of the American Water Resources Association, 2011, 47, 224-238.	2.4	19
70	Mapping Depth to Argillic Soil Horizons Using Apparent Electrical Conductivity. Journal of Environmental and Engineering Geophysics, 2010, 15, 135-146.	0.5	48
71	Soil compaction varies by crop management system over a claypan soil landscape. Soil and Tillage Research, 2010, 107, 1-10.	5.6	29
72	Groundâ€Based Canopy Reflectance Sensing for Variableâ€Rate Nitrogen Corn Fertilization. Agronomy Journal, 2010, 102, 71-84.	1.8	134

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73	Will Variableâ€Rate Nitrogen Fertilization Using Corn Canopy Reflectance Sensing Deliver Environmental Benefits?. Agronomy Journal, 2010, 102, 85-95.	1.8	39
74	Bayesian analysis of within-field variability of corn yield using a spatial hierarchical model. Precision Agriculture, 2009, 10, 111-127.	6.0	10
75	Assessing Indices for Predicting Potential Nitrogen Mineralization in Soils under Different Management Systems. Soil Science Society of America Journal, 2009, 73, 1575-1586.	2.2	128
76	Contrasting grain crop and grassland management effects on soil quality properties for a north-central Missouri claypan soil landscape. Soil Science and Plant Nutrition, 2008, 54, 960-971.	1.9	10
77	Responsive in-season nitrogen management for cereals. Computers and Electronics in Agriculture, 2008, 61, 51-62.	7.7	228
78	Emerging technologies for real-time and integrated agriculture decisions. Computers and Electronics in Agriculture, 2008, 61, 1-3.	7.7	60
79	Overview of the Mark Twain Lake/Salt River Basin Conservation Effects Assessment Project. Journal of Soils and Water Conservation, 2008, 63, 345-359.	1.6	42
80	Profitability Maps as an Input for Site-Specific Management Decision Making. Agronomy Journal, 2008, 100, 52.	1.8	12
81	Profitability Maps as an Input for Site-Specific Management Decision Making. Agronomy Journal, 2008, 100, 52-59.	1.8	36
82	Estimating Plantâ€Available Water Capacity for Claypan Landscapes Using Apparent Electrical Conductivity. Soil Science Society of America Journal, 2007, 71, 1902-1908.	2.2	48
83	Soybean Root Distribution Related to Claypan Soil Properties and Apparent Soil Electrical Conductivity. Crop Science, 2007, 47, 1498-1509.	1.8	61
84	Multidisciplinary Teams: A Necessity for Research in Precision Agriculture Systems. Crop Science, 2007, 47, 1765-1769.	1.8	25
85	Economically Optimal Nitrogen Rate Reduces Soil Residual Nitrate. Journal of Environmental Quality, 2007, 36, 354-362.	2.0	89
86	Spatially Variable Corn Yield is a Weak Predictor of Optimal Nitrogen Rate. Soil Science Society of America Journal, 2006, 70, 2154-2160.	2.2	52
87	Spatial Characteristics of Claypan Soil Properties in an Agricultural Field. Soil Science Society of America Journal, 2006, 70, 1387-1397.	2.2	66
88	Two classification methods for developing and interpreting productivity zones using site properties. Plant and Soil, 2006, 288, 357-371.	3.7	4
89	Relating apparent electrical conductivity to soil properties across the north-central USA. Computers and Electronics in Agriculture, 2005, 46, 263-283.	7.7	288
90	Delineating productivity zones on claypan soil fields using apparent soil electrical conductivity. Computers and Electronics in Agriculture, 2005, 46, 285-308.	7.7	144

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91	Fieldâ€Scale Variability in Optimal Nitrogen Fertilizer Rate for Corn. Agronomy Journal, 2005, 97, 452-461.	1.8	185
92	Relationship of Apparent Soil Electrical Conductivity to Claypan Soil Properties. Soil Science Society of America Journal, 2005, 69, 883-892.	2.2	69
93	Crop and Soil Productivity Response to Corn Residue Removal. Agronomy Journal, 2004, 96, 1.	1.8	454
94	Management Zone Analyst (MZA). Agronomy Journal, 2004, 96, 100.	1.8	204
95	Relationships between soil bulk electrical conductivity and the principal component analysis of topography and soil fertility values. Plant and Soil, 2004, 258, 269-280.	3.7	40
96	Management Zone Analyst (MZA). Agronomy Journal, 2004, 96, 100-108.	1.8	61
97	Title is missing!. Precision Agriculture, 2003, 4, 35-52.	6.0	43
98	Site-specific evaluation of the CROPGRO-soybean model on Missouri claypan soils. Agricultural Systems, 2003, 76, 985-1005.	6.1	43
99	Soil Electrical Conductivity and Topography Related to Yield for Three Contrasting Soilâ€"Crop Systems. Agronomy Journal, 2003, 95, 483-495.	1.8	162
100	Educational Needs of Precision Agriculture. Precision Agriculture, 2002, 3, 341-351.	6.0	56
101	Residual Phosphorus Distribution and Sorption in Starter Fertilizer Bands Applied in Noâ€Till Culture. Soil Science Society of America Journal, 2001, 65, 1173-1183.	2.2	15
102	Accuracy issues in electromagnetic induction sensing of soil electrical conductivity for precision agriculture. Computers and Electronics in Agriculture, 2001, 31, 239-264.	7.7	303
103	Between-Row Mowing + Banded Herbicide to Control Annual Weeds and Reduce Herbicide Use in No-till Soybean (Glycine max) and Corn (Zea mays)1. Weed Technology, 2001, 15, 576-584.	0.9	26
104	Soil Electrical Conductivity as a Crop Productivity Measure for Claypan Soils. Journal of Production Agriculture, 1999, 12, 607-617.	0.4	212
105	Evaluation of the Root Zone Water Quality Model Using Fieldâ€Measured Data from the Missouri MSEA. Agronomy Journal, 1999, 91, 183-192.	1.8	47
106	Potassium Fertilizer and Potato Leafhopper Effects on Alfalfa Growth. Agronomy Journal, 1990, 82, 1069-1074.	1.8	24
107	Understanding and Identifying Variability. Assa, Cssa and Sssa, 0, , 13-24.	0.6	3
108	Precision Variable Equipment. Assa, Cssa and Sssa, 0, , 155-168.	0.6	3